

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

GWYNETH GILBERT, MICHAEL MARTE,
MONICA DESCRESSENTIS, RACHEL ABUKHDEIR,
and STEPHANIE ANDREWS, et al.,

Plaintiffs,

v.

LANDS' END, INC.,

Defendant.

OPINION and ORDER

19-cv-823-jdp
19-cv-1066-jdp

Plaintiffs in these consolidated cases are 603 current and former Delta Air Lines employees who allege that their uniforms, which were manufactured by defendant Lands' End, Inc., transferred dye onto clothing and other property and caused health problems, including skin rashes, hair loss, difficulty breathing, and headaches. Plaintiffs sue Lands' End for negligence, strict design defect, manufacturing defect, failure to warn, breach of implied warranty, and violation of the Magnuson-Moss Warranty Act.¹ The case is proceeding on two tracks: track 1 is for issues that affect all plaintiffs or large groups of plaintiffs; track 2 is for issues specific to individual plaintiffs.

Lands' End has filed several track 1 motions, seeking rulings that would apply to all plaintiffs' personal injury claims. First, Lands' End moves to exclude the testimony and opinions of plaintiffs' causation experts on the grounds that the experts' opinions are based on unreliable methods and unsound data. Dkt. 183; Dkt. 180; Dkt. 188.² Second, Lands' End

¹ In a previous order, the court granted summary judgment to Lands' End on plaintiffs' breach of express warranty claims. Dkt. 165.

² Docket citations are to case number 19-cv-823-jdp.

moves to exclude plaintiffs' Rule 26(a)(2)(C) experts (treating physicians for 174 plaintiffs) on the ground that the treating physicians did not form causation opinions during the course of treatment. Dkt. 191. Third, Lands' End moves for summary judgment on plaintiffs' personal injury claims, arguing that without their experts, plaintiffs cannot prove that the Lands' End uniforms were defective or caused plaintiffs' health problems. Dkt. 196. Lands' End also argues that the claims of three plaintiffs are precluded by decisions of the New York Workers' Compensation Board.

For the reasons below, the court will grant the motions to exclude the expert opinions of Fred Apple, Ph.D., Pamela Scheinman, M.D., and Michael Freeman, Ph.D., because their opinions are not based on reliably applied and scientifically valid methods. In light of this ruling, the court will grant defendants' motion for summary judgment on plaintiffs' personal injury claims because plaintiffs have failed to submit evidence sufficient to show that the Lands' End uniforms were defective or that a defect in the uniforms caused their health problems. Because plaintiffs' personal injury claims will be dismissed, the court need not address the parties' disputes regarding issue preclusion, and the court will deny as moot Lands' End motion to exclude the testimony of plaintiffs' Rule 26(a)(2)(C) treating physicians.

With the personal injury claims resolved, the court will ask the parties to confer and report to the court with a schedule for resolving the remaining claims for property damage and breach of warranty.

BACKGROUND FACTS

Lands' End manufactured nearly 100 different garments as part of a new line of Delta uniforms, including dresses, skirts, shirts, blouses, sweaters, jackets, and pants. The garments

were treated with a variety of chemical additives and finishes to make them stretchy, wrinkle- and stain-resistant, anti-static, and deodorizing. The uniforms were worn by approximately 64,000 Delta employees. Since the general distribution of the new uniforms in 2018, Lands' End has received approximately 2,470 complaints from Delta employees about the uniforms. Lands' End divided the complaints into the following categories: skin irritation (1,192); allergies (419); and crocking (358). Lands' End also received a smaller number of complaints that did not fall into these categories, including complaints about hair loss and headaches.

Plaintiffs allege that chemicals and heavy metals used in the finishes of the Lands' End uniforms leached onto their skin and aerosolized, causing plaintiffs to experience numerous health problems, including: contact dermatitis, rashes, blisters, boils, hives, bruising, eczema, scarring, hair loss, follicle inflammation, respiratory distress, vocal cord disfunction, breathing difficulties, shortness of breath, coughing, tightness of chest, blurred vision, dry eyes, nosebleeds, ringing ears, sinus problems, headaches, fatigue, muscle weakness, anxiety, swollen lymph nodes, anaphylactic symptoms, and auto-immune conditions. Plts.' Am. Cpt., Dkt. 48, ¶ 5.

Both Lands' End and plaintiffs' counsel commissioned testing from third-party testing agencies to assess the degree of crocking and the amount of chemicals and heavy metals contained in individual garments from the uniform line. The testing results have varied, showing that the garments were treated with different types of finishes, depending on the garment and the manufacturing facility. Testing by Intertox and Bureau Veritas found no levels of chemicals or metals exceeding industry standards. Dkt. 56-24; Dkt. 186-1. Most testing results from various agencies showed formaldehyde levels below industry standards, but testing from TextTest showed four garments with total formaldehyde levels above the recommended

extractable limits of 75 ppm. Dkt. 55-13. Testing from Vartest labs showed that some garments crocked dye, and that the chemical fluorine leached out with purple dye. Dkt. 141-5; Dkt. 177-2. ALS testing showed the presence of chromium, nickel, antimony, and mercury in some garments, but none at levels that exceeded industry standards. Dkt. 177-2. And testing by Enthalpy Analytical showed the presence of chromium, nickel, and mercury in some garments, though not at levels above industry standards. *Id.*

ANALYSIS

Plaintiffs bring negligence and strict product liability claims to recover damages for personal injuries they say were caused by the Lands' End uniforms. Lands' End contends that plaintiffs cannot succeed on their personal injury claims because they cannot prove that the uniforms were defective or that any defect could have caused, or actually caused, plaintiffs' health problems. In particular, Lands' End argues that plaintiffs lack the expert testimony that they need to prove both the existence of a defect and causation. The court first will discuss the law that applies to plaintiffs' claims, and then will consider the parties' arguments relating to summary judgment and plaintiffs' experts.

A. Choice of law

Plaintiffs' negligence and strict product liability claims are governed by state law. But plaintiffs are citizens of 40 different states, and their alleged injuries occurred throughout the country, so there is a question about what state laws should apply to plaintiffs' claims. The court has jurisdiction over plaintiffs' state law claims under the Class Action Fairness Act, 28 U.S.C. § 1332(d), because the amount in controversy exceeds \$5,000,000 and at least one

plaintiff is a citizen of a state other than Wisconsin, where Lands' End is headquartered.³ CAFA jurisdiction is a type of diversity jurisdiction, and a court sitting in diversity applies the choice-of-law rules of the forum state to determine which state's substantive law applies to the plaintiffs' claims. *See Atl. Cas. Ins. Co. v. Garcia*, 878 F.3d 566, 569 (7th Cir. 2017). Under Wisconsin's choice-of-law rules, there is a presumption that the law of the forum state applies unless non-forum contacts are more significant. *Drinkwater v. Am. Fam. Mut. Ins. Co.*, 2006 WI 56, ¶ 40, 290 Wis. 2d 642, 658, 714 N.W.2d 568, 576. Courts also consider the following factors: predictability of results; maintenance of interstate and international order; simplification of the judicial task; advancement of the forum's governmental interests; and application of the better rule of law. *Id.*

Plaintiffs say that the court should apply Wisconsin law to their tort claims because Wisconsin is the forum state and Lands' End is headquartered here, Plts.' Br., Dkt. 206, at 17, but plaintiffs do not evaluate whether Wisconsin's contacts with the parties and injuries are more or less significant than any other forum's contacts. Lands' End disagrees that Wisconsin law should apply, but it says that it is unnecessary to resolve choice of law at this stage because there are no material differences among the laws of the various potential jurisdictions that would affect the outcome of their pending motions.

The court concludes that it is unnecessary to resolve choice of law at this stage. There are only two elements of product liability law at issue in Lands' End's motion for partial summary judgment: (1) the existence of a defect; and (2) whether the defect caused plaintiffs'

³ In a previous order, the court denied plaintiffs' motion to certify a class of current and former Delta Air Lines employees. Dkt. 165. The decision not to certify a class does not divest the court of jurisdiction under the Class Action Fairness Act. *See Cunningham Charter Corp. v. Learjet, Inc.*, 592 F.3d 805, 807 (7th Cir. 2010).

injuries. Although products liability law varies from state to state, those two elements generally are consistent across all jurisdictions. *See* 63 Am. Jur. 2d Products Liability § 531 (“The chief elements which a plaintiff must prove in [a products liability claim] are: (1) the defective and (according to most authorities) unreasonably dangerous condition of the defendant’s product; and (2) a causal connection between such condition and the plaintiff’s injuries or damages.”); *Burton v. E.I. du Pont de Nemours & Co., Inc.*, 994 F.3d 791, 818 (7th Cir. 2021) (“Both causes of action [negligence and strict liability] require a plaintiff to prove that the product causing injury was ‘defective.’”) (*quoting Godoy ex rel. Gramling v. E.I. du Pont de Nemours & Co.*, 2009 WI 78, n.7, 319 Wis. 2d 91, 106, 768 N.W.2d 674, 681). And the parties agree that plaintiffs must show both a defect and causation to succeed on their claims. Plts.’ Br., Dkt. 211, at 21; Dfts.’ Br., Dkt. 196, at 22. So in evaluating Lands’ End’s motion for partial summary judgment, the court will assume that, regardless which state law applies, plaintiffs can prevail on their negligence and strict product liability claims only by showing both: (1) that the Land’s End uniforms were defective; and (2) that the defect caused plaintiffs’ personal injuries.

B. Existence of a defect

Lands’ End argues that plaintiffs have no evidence to prove that the Lands’ End uniforms worn by plaintiffs were defective. In Wisconsin and many other jurisdictions, the law recognizes three categories of product defects: manufacturing defects, design defects, and defects based on a failure to adequately warn. *See Burton*, 994 F.3d at 818 (Wisconsin law); Restatement (Third) of Torts: Prod. Liab. § 2; Restatement (Second) of Torts § 402A. A product has a manufacturing defect when it deviates from the manufacturer’s specifications, and that deviation causes it to be unreasonably dangerous. *Godoy*, 2009 WI 78, ¶ 29. A product has a design defect when the design itself is the cause of the unreasonable danger. *Id.* And a

product is defective based on a failure to adequately warn when an intended use of the product is dangerous, but the manufacturer did not provide sufficient warning or instruction. *Id.*

Plaintiffs' amended complaint alleges that the uniforms had all three types of defects. Plts.' Am. Cpt., Dkt. 48, ¶¶ 60–89. But plaintiffs failed to respond to Lands' End's argument that they lack of evidence of a specific defect related to plaintiffs' personal injury claims. Plaintiffs' failure to respond could be reason enough to conclude that plaintiffs cannot satisfy the requirement to show that Lands' End uniforms were defective. *See Bonte v. U.S. Bank, N.A.*, 624 F.3d 461, 466 (7th Cir. 2010) ("Failure to respond to an argument . . . results in waiver.") But the court will consider whether the evidence plaintiffs discuss in their brief could satisfy their burden to prove the existence of a defect.

Plaintiffs argue in their response brief that their personal injuries were caused by chemicals and heavy metals in the uniforms, which plaintiffs breathed or absorbed into their bodies because the garments were not properly scoured or after-washed during the manufacturing process. Based on plaintiffs' arguments, the court can fairly infer that plaintiffs' theory is that the alleged defect in the uniforms is the use of chemicals and heavy metals in conjunction with the failure to properly after-wash the garments, allowing excess dye to remain on the garment and eventually bleed off with chemicals onto plaintiffs. Depending on whether the manufacturer followed Lands' End's specifications, this theory could support either a manufacturing defect or a design defect.

Lands' End argues that plaintiffs need expert testimony to prove that those characteristics in a garment constituted a defect, Dft.'s Br., Dkt. 197, at 23, and plaintiffs concede the point by failing to argue otherwise. *See Bonte*, 624 F.3d at 466. The court agrees that a lay jury would not have the knowledge or experience to determine whether any garment

in the Lands' End uniform line was defective. A jury would not know whether and at what levels specific chemicals or heavy metals in a garment are dangerous to humans, whether a garment was been properly scoured or after-washed, whether the failure to properly scour or after-wash a garment could cause dangerous chemicals or heavy metals from a garment to leach out of a garment, and whether a person could absorb chemicals or heavy metals in amounts capable of causing the health problems alleged by plaintiffs. Expert testimony is clearly required. *See City of Cedarburg Light & Water Comm'n v. Allis-Chalmers Mfg. Co.*, 33 Wis. 2d 560, 568, 149 N.W.2d 661, 662 (1967) (expert testimony needed to resolve disputes involving technical, scientific, or medical matters outside the common knowledge or experience of jurors).

Plaintiffs point primarily to the report of Dr. Peter Hauser, their textiles expert, as evidence that the failure to properly after-wash and scour the uniforms was a manufacturing and design defect that caused excess crocking and transferred dye to plaintiffs' personal property. Plts.' Br., Dkt. 206, at 20. But Hauser's report limited his opinions to plaintiffs' property damage claims. Hauser Rep., Dkt. 177, ¶¶ 15, 16. He did not opine that crocking in the garments would transfer an amount of chemicals or heavy metals sufficient to cause toxicity, and he testified at his deposition that he was not giving any opinions about chemicals, heavy metals, or defects in the uniforms that may have affected plaintiffs' health. Hauser Dep., Dkt. 171, at 220–21, 234. He also testified that many of the substances found during uniform testing, including flourine, magnesium, sodium, and silicon, were either substances that are used frequently in garments or that were found in low levels that would not be concerning to him. *Id.* at 266–69, 277–78. Plaintiffs cannot rely on Hauser's testimony to prove that there was a manufacturing or design defect in the Lands' End uniforms related to their health problems.

Plaintiffs' other experts did not provide opinions about any specific defect in the uniforms either. Dr. Michael Freeman, plaintiffs' epidemiology expert, testified that he was not offering any opinions about the quality or nature of the textiles, the chemicals contained in the textiles, or whether the uniforms were defectively manufactured or designed. Freeman Dep., Dkt. 169, at 78–79. Freeman also did not provide any opinions about a failure to warn.

Dr. Fred Apple, plaintiffs' toxicology expert, was retained to offer opinions on causation, and he did not identify any specific manufacturing, design, or warning defect in his report. He stated in his report that certain substances were present in the uniforms at “extremely high levels” or “elevated levels,” Apple Rep., Dkt. 172, at 5–7, but he testified that the test results he reviewed showed “quite a bit of variability” as to whether a garment contained metals, Apple Dep., Dkt. 168, at 122, and that he was not an expert on textiles or crocking. *Id.* at 95. He testified that he did not know the allowable limits or regulatory values for any of the substances in the uniforms, *id.* at 132–33, the dose at which any of the chemicals or heavy metals involved could cause any symptom in a person, or whether a toxic level of any chemical could be transferred from the uniforms to a person. *Id.* at 88, 131. Apple's opinions do not address whether any defect in the manufacturing or design of the uniforms rendered them unreasonably dangerous. His testimony does not satisfy plaintiffs' burden of proving a defect.

Plaintiffs' third retained expert, Dr. Pamela Scheinman, is a dermatologist, not a textile expert, and she did not identify a defect in the design, manufacturing, or marketing of the uniforms. Her opinions concern the causal connection between chemicals and heavy metals in the uniforms and plaintiffs' dermatological, respiratory, and ocular symptoms. Scheinman Rep., Dkt. 175. She did not interpret laboratory testing results or opine that the presence of certain chemicals, or chemicals at certain levels, rendered the uniforms dangerous or defective.

Scheinman testified at her deposition that she was not an expert in toxicology or exposure limits, Scheinman Dep., Dkt. 172, at 30, 55, 163–64, that she was not providing an opinion about which specific metals or chemicals caused plaintiffs’ symptoms, *id.* at 165, that she did not know the exposure level required to cause specific symptoms, *id.* at 172–73, and that she did not try to match different chemicals, metals, or garments with the plaintiffs’ symptoms. *Id.* at 169.

The existence of a defect is a required element of plaintiffs’ product liability claims, and plaintiffs were required to come forward with admissible evidence to support every element on which they bear the burden of proof. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 324 (1986). Plaintiffs rely, essentially, on a simplistic post-hoc theory, that because some flight attendants reported reactions after wearing the new uniforms, the uniforms must be defective. But Rule 702 and the *Daubert* standard requires a more robust showing. Plaintiffs’ experts did not address whether the Lands’ End uniforms contained a defect that caused plaintiffs’ health problems, and plaintiffs have presented no other evidence from which a reasonable jury could conclude that a deviation in the manufacturing of the uniforms rendered them unreasonably dangerous, that the uniform design rendered them unreasonably dangerous, or that Lands’ End failed to provide sufficient warning regarding the dangers of the uniforms. Therefore, plaintiffs do not have the necessary evidence to support their personal injury product liability claims.

C. Causation

Even if plaintiffs had presented evidence that the Lands’ End uniforms were defective, plaintiffs have failed to present admissible evidence sufficient to prove causation. To succeed on their personal injury claims, plaintiffs must show that the uniform’s alleged defect—the

presence of chemicals and heavy metals in improperly scoured garments—caused their injuries. *See Burton*, 994 F.3d at 824.

The parties agree that plaintiffs’ negligence and strict product liability claims are similar to toxic tort claims, for which plaintiffs must prove both general and specific causation. Dfts.’ Br., Dkt. 196, at 18–19; Plts.’ Br., Dkt. 206, at 24. General causation refers to whether the substance or substances at issue are *capable* of causing the harm alleged. *See C.W. ex rel. Wood v. Textron, Inc.*, 807 F.3d 827, 831 (7th Cir. 2015). Specific causation refers to whether the substance did, in fact, cause the particular harm alleged by a particular individual. *Id.* Plaintiffs do not dispute Lands’ End’s assertion that they must present expert testimony to prove that substances in the uniforms could have caused, and actually caused, their health problems. And as with the existence of a defect discussed above, the court agrees that plaintiffs’ theory of personal injury requires expert testimony. A lay jury could not determine on its own whether toxins in the Lands’ End uniforms entered plaintiffs’ body through dermal or respiratory exposure and caused the numerous health problems alleged by plaintiffs.

Plaintiffs rely on the opinions of three retained experts to prove general causation for all plaintiffs and specific causation for a portion of plaintiffs: Dr. Michael Freeman, the epidemiologist; Dr. Fred Apple, the toxicologist; and Dr. Pamela Scheinman, the dermatologist. Lands’ End argues that these experts’ opinions should be excluded because they are based on unreliable methodologies and unsound data.

In assessing whether the expert opinions are admissible, the court serves as a gatekeeper to ensure that the proffered expert testimony meets the requirements of Federal Rule of Evidence 702. *See Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993); *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999). The court must ensure that the expert is qualified, that the

expert's opinions are based on reliable methods and reasoning, and that the expert's opinions will assist the jury in deciding a relevant issue. Fed. R. Evid. 702; *Myers v. Ill. Cent. R.R. Co.*, 629 F.3d 639, 644 (7th Cir. 2010). Courts can examine the reliability of an expert's principles and methods by looking at factors such as whether the scientific theory or technique can be (and has been) tested; whether the theory or technique has been subjected to peer review and publication; whether a particular technique has a known potential rate of error; and whether the theory or technique is generally accepted in the relevant scientific community. *Burton*, 994 F.3d at 826; *Schultz v Azko Nobel Paints, LLC*, 721 F.3d 426, 431 (7th Cir. 2013) (citing *Daubert*, 509 U.S. at 593–94). When these standards are applied to the expert opinions of Freeman, Apple, and Scheinman, it is clear that the causation opinions must be excluded.

1. Dr. Michael Freeman, Ph.D.

Dr. Michael Freeman is an epidemiologist, forensic consultant, and professional expert witness who has provided expert opinion in at least 350 trials and 900 depositions. Freeman Dep., Dkt. 169, at 44. Most of those cases involved traffic accidents and medical negligence claims, but Freeman also has provided expert opinion in environmental exposure cases. *Id.* Freeman offers both general and specific causation opinions in his report. He opines that the Lands' End uniforms were capable of causing, and were the most likely cause of, plaintiffs' various health problems. Freeman Rep., Dkt. 173, at 24.

Epidemiologic studies are often the best evidence of general causation in toxic exposure cases, and scientists frequently rely on epidemiological data to establish an association between a chemical and a disease or set of symptoms. See Michael D. Green, D. Michael Freedman, & Leon Gordis, "Reference Guide on Epidemiology," *Reference Manual on Scientific Evidence* 551–52 (Federal Judicial Center 3d ed. 2011) ("Epidemiology focuses on the question of general

causation (i.e., is the agent capable of causing the disease?)”); *Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 882 (10th Cir. 2005)(“[E]pidemiology is the best evidence of general causation in a toxic tort case.”); *Rains v. PPG Indus., Inc.*, 361 F. Supp. 2d 829, 834 (S.D. Ill. 2004) (“Epidemiologic studies are the primary, generally accepted methodology for demonstrating a causal relation between a chemical and the set of symptoms or a disease.”).

Epidemiologists generally use a two-part process for determining causation. First, they assess whether there is an association between exposure to a drug or toxin and a disease. *See Reference Manual on Scientific Evidence* 374, 566, 598–600 (“[T]he first question an epidemiologist addresses is whether an association exists between exposure to the agent and disease.”). An association exists between exposure to a substance and a disease when the two “occur together more frequently than one would expect by chance.” *Id.* at 566. An association does not prove a cause-effect relationship, but if an association is found based on epidemiological or other scientific data, an epidemiologist can assess whether the association reflects a causal relationship by applying the nine-part “Bradford Hill criteria.” *Reference Manual on Scientific Evidence* 600; *Cornell v. 360 W. 51st St. Realty, LLC*, 22 N.Y.3d 762, 783, 986 N.Y.S.2d 389, 9 N.E.3d 884 (2014) (“Although a causal relationship is one possible explanation for an observed association between an exposure and a disease, an association does not necessarily mean that there is a cause-effect relationship.”). The Bradford Hill criteria include: (1) plausibility; (2) strength of association; (3) consistency; (4) biological gradient (dose-response relationship); (5) specificity of the association; (6) analogy; (7) temporality; (8) experiment (cessation of exposure); and coherence. Dkt. 182-1, Austin Bradford Hill, “The Environment and Disease: Association or Causation?,” 58 Proc. Royal Soc’y Med. 295 (1965).

Freeman purports to rely on the Bradford Hill criteria and the epidemiological processes for determining causation outlined in the *Reference Manual on Scientific Evidence*. Freeman Rep., Dkt. 173, at 1. But Freeman does not actually apply those methods in his report.

Freeman skips the first step of a valid Bradford Hill epidemiological analysis: he fails to identify an association between the Lands' End uniforms and plaintiffs' symptoms that is based on epidemiological or other reliable data. See *Reference Manual on Scientific Evidence* 598–99 (“We emphasize that these [Bradford Hill] guidelines are employed only *after* a study finds an association, to determine whether that association reflects a true causal relationship”); *In re Lipitor (Atorvastatin Calcium) Mktg., Sales Pracs. & Prod. Liab. Litig.*, 174 F. Supp. 3d 911, 925 (D.S.C. 2016) (“Courts exclude expert testimony that attempts to start at step two, applying the Bradford Hill criteria without adequate evidence of an association.”) (citing cases). To evaluate a potential association, an epidemiologist generally would compare the health of people exposed to a substance (the treatment group) to that of persons not exposed (the control group) to determine whether the exposure to the substance is associated with an increased rate of disease or symptoms. *Reference Manual on Scientific Evidence* 218–19. But Freeman did not conduct this sort of analysis, as he identified no control group and conducted no analysis of the treatment group, which would be the approximately 64,000 Delta employees who wore the uniforms and were potentially exposed to the substances at issue. In fact, he did not conduct any epidemiological studies to determine whether there was an association between any of the Lands' End uniform items and any of plaintiffs' health symptoms, nor does he cite to any peer-reviewed epidemiological or toxicological studies that found an association between the chemicals he cites and the alleged health symptoms. There is nothing in Freeman's report analyzing whether individuals wearing the Lands' End uniforms developed the specific health

problems identified by plaintiff “more frequently than one would expect by chance.” *Reference Manual on Scientific Evidence* 566. Without such a comparison, one cannot determine whether the reported frequency of symptoms among Delta employees who wore the uniforms is higher than, lower than, or equal to that among Delta employees who did not wear the uniforms.

Plaintiffs argue that Freeman found an association between the uniforms and plaintiffs’ symptoms based on prior reports of health problems by American airline employees, Alaska airline employees, and Transportation Security Administration employees. Plaintiffs argue that one significant study showing evidence of association was the Harvard Flight Attendant Health Study, which was conducted by Harvard’s School of Public Health, and which found an association between the introduction of new Alaska airlines uniforms and employee health problems between 2007 and 2015. But Freeman does not explain in his report why complaints by employees of other airlines is evidence of an association between plaintiffs’ symptoms and the uniforms at issue in this case. Lands’ End did not design or manufacture the uniforms for the Alaska, American, or TSA employees, and Freeman presents no evidence that the materials, finishes, chemicals, or heavy metals in the Lands’ End uniforms are the same as those found in other airline employee uniforms.

Even if Freeman had identified adequate evidence of an association between the Lands’ End uniforms and the plaintiffs’ symptoms, his report does not apply the Bradford Hill causation criteria properly. “[A]n expert must do more than just state that she is applying a respected methodology; she must follow through with it.” *Brown*, 765 F.3d at 773.

First, Freeman asserts that the Bradford Hill criteria can be “distilled into a 3-step approach” that considers only plausibility, temporality, and alternative causation. Freeman Rep., Dkt. 173, at 14–15. The only support he cites for this approach are two articles that he

wrote on the topic: a non-peer reviewed guest editorial published in an orthopedics journal and an article about motor vehicle crashes. He cites no scientific support for using his distilled three-step approach to assess causation in a toxic exposure case.

Second, although he states that his three-step approach incorporates all of the Bradford Hill criteria, his analysis does not clearly address all nine criteria. Plaintiffs attempt to remedy this in their brief, explaining how Freeman's opinion can fit into the Bradford Hill analysis. But all of Freeman's opinions must be contained in his expert report, and plaintiffs cannot attempt to expand on Freeman's opinions or fix deficiencies in his report through attorney briefing.

One important Bradford Hill criterion that Freeman failed to assess was the dose-response relationship. He did not attempt to determine the dose of any substance to which a plaintiff could have been exposed by wearing a particular garment in the Lands' End uniform line, despite testifying at his deposition that such information would be important to a causation analysis. Freeman Dep., Dkt. 169, at 97, 166–67. *See Cunningham v. Masterwear Corp.*, 569 F.3d 673, 675 (7th Cir. 2009) (expert testimony properly excluded where expert presented no evidence or scientific literature to link level and duration of exposure to alleged symptoms); *Higgins v. Koch Dev. Corp.*, No. 3:11-CV-81-RLY-WGH, 2013 WL 6238650, at *9 (S.D. Ind. Dec. 3, 2013) (expert's opinion that did not discuss extent of exposure and failed to rely on medical literature was "not sufficient methodology for proving causation"). Plaintiffs respond that Freeman relied on information about how often plaintiffs wore their uniforms, measured in days, and compared that to the number of symptoms the plaintiffs' reported, to determine whether there was a dose-response relationship." But Freeman admitted at deposition that that

information was self-reported and imprecise, and that it did not provide any statistically significant information regarding dose-response. Freeman Dep., Dkt. 169, at 176.

Freeman's reliance on self-reported information leads to the third, and perhaps most significant, problem with Freeman's report: his opinions are based almost entirely on unreliable data. Freeman's causation analysis relies on data he summarized from questionnaires completed by 982 plaintiffs. Freeman Dep., Dkt. 169, at 58–59. Plaintiffs were asked to self-report which uniform items they wore, whether they wore each item “occasionally, weekly, or daily,” the health symptoms that they alleged were caused by the uniform, whether they experienced any of those symptoms prior to when they first wore the uniform, and to list any respiratory, cardiovascular, or dermatological illness that they did not attribute to the uniform. Dkt. 173, at 26–27. But Freeman provides no basis for relying on the questionnaire data to identify a causal relationship between exposure to chemicals in the garments and the symptoms reported by plaintiffs. The questionnaires were not drafted by epidemiologists or other scientists to evaluate association or causation, as they were in the Harvard study on which Freeman relies, and the questionnaires were not designed to control for errors or subjective responses. The questionnaires instead were developed by counsel for Lands' End to gather information and streamline discovery.

The questionnaires were completed only by plaintiffs in this matter after litigation began, that is, they were completed only by Delta employees who already had alleged health injuries from the uniforms. Freeman admitted that some of the answers in the questionnaires were vague, contradictory, erroneous, or ambiguous. Freeman Dep., Dkt. 169, at 183–84, 201, 204. Freeman also conceded that the plaintiffs had a financial interest in answering that they had experienced medical symptoms after they started wearing the uniforms. Freeman Dep.,

Dkt. 169, at 188–89. He also agreed that the questionnaires could not show whether the plaintiffs actually experienced the symptoms that they alleged. *Id.* at 115 (“I don’t truly know whether any of these symptoms are actually experienced because it is an individual experience like the bananas make me nauseous kind of thing.”). Nonetheless, Freeman did not review any medical records or take any steps to confirm whether the information in the questionnaires was accurate. Freeman Dep., Dkt. 169, at 99. Freeman’s admitted failure to account for potentially unreliable information undermines all of his opinions. See *Reference Manual on Scientific Evidence* 583 (“In reviewing the validity of an epidemiologic study, the epidemiologist must identify potential biases and analyze the amount or kind of error that might have been induced by the bias.”); *Smith v. Illinois Dep’t of Transportation*, 936 F.3d 554, 558 (7th Cir. 2019) (expert testimony properly excluded where expert did not interview plaintiff or review deposition testimony and “omitted a substantial set of facts from her analysis, and instead relief only on what appears to be plaintiff-curated records”); *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 762 (3d Cir. 1994) (“[W]here [doctors] based their conclusion as to a plaintiff’s symptoms solely on the plaintiff’s self-report of illness in preparation for litigation, the district court acted within its discretion in excluding the testimony as based on an unreliable source of information.”).

The questionnaires also don’t provide information about all of the groups that should be evaluated in an epidemiological study. Specifically, the questionnaires provide no information about Delta employees who wore the uniforms but did not report any symptoms; employees who did not wear the uniforms but reported symptoms; or employees who did not wear the uniforms and did not report any symptoms. An accurate epidemiological causation

analysis would compare the probability of a health outcome in an exposed group to an unexposed group, but Freeman's report includes no such analysis.

Freeman also provides a specific causation opinion, concluding that the Lands' End uniforms likely caused the health symptoms of 276 plaintiffs. But this opinion is based on unreliable epidemiological methods also. Freeman purports to reach his specific causation opinions by applying the "Naranjo algorithm," which is also known as the "Adverse Drug Reaction Probability Scale." Lands' End argues that the Naranjo algorithm applies only in the context of assessing adverse drug reactions, and that Freeman has cited no scientific literature that would supporting using the algorithm to assess causation in this case.

Plaintiffs do not argue that Freeman could reliably reach a specific causation opinion by applying the Naranjo algorithm. Instead, plaintiffs argue that Freeman applied the Naranjo algorithm as part of a "totality-of-the-evidence" methodology. But Freeman never discussed a "totality-of-the-evidence" methodology in his report or at his deposition. And Freeman's opinion is not consistent with the way courts describe a "totality" or "weight of the evidence" methodology. *See, e.g., Milward v. Acuity Specialty Prod. Grp., Inc.*, 639 F.3d 11, 17–18 (1st Cir. 2011) (describing "weight of evidence" approach in six steps). Although plaintiffs cite *Milward*, they do not explain how Freeman applied any of the six steps identified in that case. It is apparent that he did not—he did not explain how he chose and weighed the evidence that he reviewed or how he considered and weighed plausible explanations. Nor did Freeman explain how he accounted for weaknesses in the data, such as ambiguous questionnaire results and potential bias. Plaintiffs cannot avoid the errors of Freeman's report by attempting to reframe his methodology. For all of these above reasons, Freeman's opinions on general and specific causation will be excluded.

2. Dr. Fred Apple, Ph.D

Dr. Apple is forensic toxicologist, chemist, and medical examiner who specializes in therapeutic drug monitoring and forensic postmortem toxicology. Apple Dep., Dkt. 168, at 12. Apple has no experience or background in textile or garment testing, but Lands' End does not challenge Apple's expertise or qualifications, so the court will assume that he is qualified to offer the opinions that he provides. The gist of his opinions, which are set forth in Apple's seven-page report, are the following: (1) garment testing performed by others shows that the uniforms were not color-fast and contained chemicals and heavy metals; (2) according to scientific literature, some of the chemicals and heavy-metals found in the uniforms can cause various health problems; (3) plaintiffs suffered from various health problems; and (4) the chemicals or heavy metals in the uniforms caused plaintiffs' health problems. Apple Rep., Dkt. 172, at 4–7.

As an initial matter, the parties dispute whether Apple's opinions are “general causation” or “specific causation” opinions. Lands' End argues that Apple's opinions relate to “specific causation” because Apple purports to provide an opinion about the causes of the specific plaintiffs' health problems, while plaintiffs say that they are proffering Apple only to support their general causation theory that the uniforms “were capable of causing the toxic health effects experienced by the plaintiffs.” Plts.'s Br., Dkt. 211, at 6, 11.

Defendants are correct. A toxicologist offering an opinion on general causation would consider whether a specific substance *could* cause the specific effect claimed by the plaintiff at the specified exposure, duration, frequency, timing, and route. *See Higgins v. Kock Dev. Corp.*, 794 F.3d 697, 701 (7th Cir. 2015) (“General causation refers to whether the substance at issue had the capacity to cause the harm alleged.”). But Apple never opines that the specific heavy

metals and chemicals in the uniforms were *capable* of causing the symptoms that plaintiffs suffered. Instead, Apple opines that the uniforms *caused* the specific toxic health effects alleged by plaintiffs. Apple Rep., Dkt. 172, ¶ 9; ¶ 11 (“the symptoms or injuries complained of . . . were proximately caused by heavy metals and chemicals leeching or otherwise bleeding out from the uniforms”). His opinion is a specific causation opinion. In any event, regardless whether Apple provides a specific or general causation opinion, the court will exclude it under Rule 702 because the Apple’s opinions are not based on a scientifically valid methodology.

Apple’s report does not purport to rely on any particular methodology to evaluate the causal link between plaintiffs’ symptoms and the various substances Apple cites as being present in garment testing results. Nor could Apple explain during his deposition what methodology he applied. When asked to explain the basis for his causation opinion, Apple testified:

I’m basing my opinions on the facts that uniforms are found to have these metals and chemicals and these metals and chemicals are well scientifically medically founded to cause all the symptomologies I described in my Rule 26 report as an example.

Id. at 124. When asked to explain his methodology further, Apple stated:

The substantial causal factors of causation is you have evidence of crocking, you have evidence of symptoms consistent with the heavy metals and the chemicals that were crocked, you have evidence of flight attendants having crocking on their clothing and on their bodies, you have evidence in some cases if you remove that it disappears so to me that is — to me a scientifically and medically sound methodology to follow what’s happening here.

Id. at 162.

These statements don’t describe a methodology based on sound toxicological principles, and they undermine the value of Apple’s report. *See Zamecnik v. Indian Prairie School Dist. No.*

204, 636 F.3d 874, 880–81 (7th Cir. 2011) (failure to describe methodology in report undermines expert’s opinion); *Minix v. Canarecci*, 597 F.3d 824, 835 (7th Cir. 2010) (“The expert must explain the methodologies and principles supporting the opinion.”).

Expert toxicologists generally determine causal connections between a substance and a symptom or disease by identifying the substance at issue, assessing whether the plaintiff was exposed to the substance in a manner that could lead to absorption in the body, and evaluating whether the dose to which the plaintiff was exposed was sufficient to cause the symptom or disease. See Bernard D. Goldstein & Mary Sue Henifin, “Reference Guide on Toxicology,” *Reference Manual on Scientific Evidence* 561–62 (Federal Judicial Center, 3d ed. 2011) (describing assessments that expert toxicologist should make to support causation opinions); *Wintz By & Through Wintz v. Northrop Corp.*, 110 F.3d 508, 513 (7th Cir. 1997) (affirming exclusion of expert toxicologist’s opinion because it was based on unreliable methodology, and citing discussion in *Reference Manual on Scientific Evidence*); *Korte v. Exxonmobil Coal USA, Inc.*, 164 F. App’x 553, 557 (7th Cir. 2006) (same). But that is not the type of analysis that Apple describes in his report or at his deposition. Instead, Apple’s report is perfunctory, lacks substance, and offers no explanation of the science that he purports to apply in arriving at his causation conclusions.

Apple did not perform the first step of a toxicology analysis by attempting to identify which substances caused which of plaintiffs’ symptoms, let alone discuss the toxicology of those substances. He lists various chemicals that were found at various levels in various test results, Apple Rep., Dkt. 172, ¶ 10, but he does not link any of the substances to any symptoms or health concerns in his report. Plaintiffs respond that Apple did not identify any specific chemicals of concern or link chemicals to symptoms, because “each of the substances at issue

in this case is biologically capable of causing the majority of the symptoms experienced by Plaintiffs.” Plts.’ Br., Dkt. 211, at 14. To support their assertion, plaintiffs attach a “symptoms chart” to their brief, Dkt. 211-1, but plaintiffs don’t identify the source of the chart. According to Lands’ End, the chart does not qualify as scientific evidence because it comes from a Facebook group of Delta flight attendants, but in any event, Apple disclaimed relying on the chart for his opinions. Apple. Dep., Dkt. 168, at 151–53. The unsourced chart cannot overcome Apple’s failure to identify the substances for which he was assessing a potential causal link. *See Aurand v. Norfolk Southern Ry. Co.*, 802 F. Supp. 2d 950, 955 (N.D. Ind. 2011) (excluding expert toxicologist in part because his report, which listed a number of chemicals, did not “specifically identify the carcinogenic chemicals to which plaintiffs were exposed, nor do the conclusions state which agent or agents caused the plaintiffs’ cancers”).

Nor did Apple perform the second basic step of a toxicology analysis: evaluating the route of exposure. This step concerns whether and how any plaintiff could have absorbed an amount of substance sufficient to cause a symptom. Apple states in his report that plaintiffs were exposed to heavy metals and chemicals by bleeding or leaching from the fabric onto their skin, or by the heavy metals and chemicals becoming airborne and inhaled. Apple Rep., Dkt. 172, ¶ 11. But Apple did not identify which chemicals could have been absorbed dermally or which chemicals could have become airborne and inhaled, or at what levels the substances could be absorbed or inhaled, even though he admitted at his deposition that toxicity varies by route of exposure and chemical form or compound. Apple Dep., Dkt. 168, at 74–77. He also did not discuss any scientific sources containing such information. See also *Ervin v. Johnson & Johnson, Inc.*, 492 F.3d 901, 904–05 (7th Cir. 2007) (affirming exclusion of expert report that

failed to articulate “any scientifically physiological explanation as to how [drug at issue] would cause arterial thrombosis.”)

Third, Apple did not address the level at which any substance could cause any symptom, or whether any garment in the Lands’ End uniform line released any substance at any dangerous level. Apple states in his report that certain substances were present in the uniforms at “extremely high levels” or “elevated levels,” Apple Rep., Dkt. 172, at 5–7, but he admitted at his deposition that he did not know the dose at which any of the chemicals or heavy metals involved could cause any symptom, that that he was unaware of the dose of substances to which any plaintiff was actually exposed, that he had made no attempt to discern that information, and that he did not think that determining dose was necessary to assess a causal connection between an exposure and a symptom. Apple Dep., Dkt. 168, at 51, 55, 132–33, 138. Apple instead testified that he did not need to determine or even hypothesize as to the particular dose to which any plaintiff was exposed, because, although a person’s response to a chemical or heavy metal can be affected by the length of time someone is exposed to the toxin, *id.* at 69, “every individual experiences differences in the reactiveness to chemicals in metals.” Apple Dep., Dkt. 168, at 63–64, 68, 80.

Contrary to Apple’s testimony, it is generally important to know the level of exposure to a substance because a “central tenet” of toxicology is that “all chemical agents are intrinsically hazardous—whether they cause harm is only a question of dose.” *Reference Manual on Scientific Evidence* 636. *See also Williams v. Mosaic Fertilizer, LLC*, 889 F.3d 1239, 1246 (11th Cir. 2018) (“When analyzing an expert’s methodology in toxic tort cases, the court should pay careful attention to the expert’s testimony about the dose-response relationship. This attention is due because dose-response is ‘the hallmark of basic toxicology.’”) (citation omitted); *Mitchell*

v. Gencorp Inc., 165 F.3d 778, 781 (10th Cir. 1999) (“Scientific knowledge of the harmful level of exposure to a chemical plus knowledge that plaintiff was exposed to such quantities are minimal facts necessary to sustain the plaintiff’s burden in a toxic tort case.”) (citations omitted). Apple’s failure to acknowledge the importance of dose in assessing causation renders his opinion unreliable.

As they did with Freeman’s report above, plaintiffs try to salvage Apple’s opinion by arguing that Apple applied a “totality-of-the-evidence” methodology to form his opinions. But, like Freeman, Apple never discussed a “totality-of-the-evidence” methodology in his report or at his deposition. Nor is Apple’s opinion consistent with a “totality of the evidence” methodology. *See Milward*, 639 F.3d at 17–18. Like Freeman, Apple did not explain how he chose and weighed the evidence that he reviewed, how he considered and weighed plausible explanations, or how he accounted for weaknesses in the data, such as testing results that showed no detectable levels of heavy metals or chemicals in the uniforms, or that many of the chemicals he discusses are commonly found in foods, drinking water, soil, ambient air, consumer products, and the human body.

In sum, Apple’s report contains no indication that his opinions are the product of reliable principles and methods, and no indication that in formulating his opinion, he applied valid principles and methods reliably to the facts of the case. His report is nothing more than factual recitations and conclusions without any rational connection between them. *See Rowe v. Gibson*, 798 F.3d 622, 627 (7th Cir. 2015) (“A court should not ‘admit opinion evidence that is connected to existing data only by the ipse dixit of the expert.’”) (*quoting General Electric Co. v. Joiner*, 522 U.S. 136, 146 (1997)); *Zamecnik*, 636 F.3d at 881 (“Mere conclusions, without a hint of an inferential process, are useless to the court.”); *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316,

319 (7th Cir. 1996) (“[A]n expert who supplies nothing but a bottom line supplies nothing of value to the judicial process.”) (citation omitted); *Higgins*, No. 3:11-CV-81-RLY-WGH, 2013 WL 6238650, at *9 (“His opinion essentially boils down to exposure to chlorine gas may cause the types of symptoms seen in Plaintiffs, ergo, chlorine exposure caused the symptoms. This does not allow the court to assess what, if any, methodology was used in arriving at these conclusions.”). So the court will exclude his opinions. Plaintiffs cannot rely on Apple’s report to prove that the claimed exposures to chemicals in the uniforms can result in the reported health injuries (general causation), or that the claimed exposures resulted in the reported health injuries of specific plaintiffs (specific causation).

3. Dr. Pamela Scheinman, M.D.

Dr. Scheinman is a board-certified dermatologist who has taught and practiced in the field of dermatology for more than 30 years, including at Harvard Medical School, University of Rochester School of Medicine and Dentistry, George Washington University Medical Center, and Tufts University School of Medicine. She has particular expertise and interest in patch testing and allergic contact dermatitis. Scheinman opines in her report that the allergens and toxins in the Lands’ End uniforms “proximately caused” plaintiffs’ dermatological symptoms, respiratory symptoms, ocular symptoms, alopecia, and sensitization. Scheinman Rep., Dkt. 175, at 4. Scheinman’s opinion is based on her review of partial medical records for 15 plaintiffs, positive patch testing of the uniforms from three plaintiffs, a portion of the garment testing results for third-party testing agencies, and a chart compiled by plaintiffs’ counsel summarizing the medical injuries alleged by plaintiffs. *Id.* at 5; Scheinman Dep., Dkt. 170, at 79–85. Plaintiffs offer Scheinman’s opinions to prove general causation for all plaintiffs

and specific causation for the 15 plaintiffs whose medical records Scheinman reviewed. However, all of Scheinman's causation opinions are inadmissible.

Scheinman makes broad statements about causation for all plaintiffs in her report, but she qualified her causation opinions significantly during her deposition. She testified that to accurately assess what caused each plaintiffs' health problems would require a complex and fact-dependent analysis for each individual, which she admittedly did not perform. Scheinman Dep., Dkt. 170, at 34–37. For example, to determine the cause of a patient's skin problem, Scheinman generally would talk to the patient or review the patient's complete medical history, conduct a physical examination or view pictures, order lab work or a biopsy, order patch testing, rule out potential causes, and depending on the circumstances, suggest changes to the patient's skin care products, textiles, or diet. *Id.* at 41–43, 53–54. *See also id.* at 100 (“Q: Would you ever diagnoses a patient yourself without ever having spoken to the patient or seen medical records? A. Would I diagnose a patient without having seen them or seeing the medical records; in general no.”). Scheinman conceded that she did not have sufficient information to conduct that analysis for any plaintiff. *Id.* at 92, 100. She admitted that she did not speak to any plaintiff, that she did not know whether the medical records she reviewed for 15 plaintiffs were representative of all plaintiffs, and that she had seen only a few poor photocopies of plaintiffs' skin conditions. *Id.* at 89, 99–100. She testified that if a substantial portion of the claimed symptoms were self-reported she would “want to see validation” by “someone else looking at it,” *id.* at 85, but admitted that she made no attempt to match up plaintiffs' self-reported questionnaire data and their medical records, *id.* at 80. When asked whether she had “information one way or the other about whether the uniforms were a contributing cause of

skin rashes for any employees other than [the 15 plaintiffs] whose records [she] reviewed already,” Scheinman responded:

I mean I can only summarize, but yes. I can’t—without seeing them, I can’t. But it does seem suspicious. It seems like a smoking gun to me.

Id. at 92.

Scheinman’s deposition testimony confirms that she did not apply valid dermatological methods to reach her opinions about general causation for all plaintiffs. Her general causation opinions amount to unsupported speculation, not an expert opinion supported by any acceptable scientific method. *See Naeem*, 444 F.3d at 608 (“Talking off the cuff—deploying neither data nor analysis—is not an acceptable methodology.”) (citation omitted); *Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 705 (7th Cir. 2009) (“[A] medical expert’s ultimate opinion must be grounded in the scientific process and may not be merely a subjective belief or unsupported conjecture.”).

There are several other problems with Scheinman’s expert opinions relating to both general and specific causation. Scheinman did not determine causation for those the 15 plaintiffs for whom she reviewed medical records by using any reliable methodology. She reviewed only a portion of their medical records, did not talk to or examine them, and did not attempt to link any particular plaintiffs’ symptom to any particular garment, let alone a specific allergen in a garment. She also failed to rule out other potential causes. *See Donaldson v. Johnson & Johnson*, — 4th —, No. 21-2028, 2022 WL 2145276, at *7 (7th Cir. June 15, 2022) (“Obviously, a statement that there are no secondary causes apparent in a tiny portion of the medical record does not exclude secondary causes.”).

In addition, although Scheinman offers opinions in her report about the cause of all plaintiffs' respiratory symptoms, eye symptoms, alopecia, and sensitization, she conceded during her deposition that her opinions on these topics were speculative. She testified that she had no experience in diagnosing respiratory conditions, Scheinman Dep., Dkt. 170, at 111, and that she had relied on the partial medical records from two or three people and testing results from one or two garments to conclude that all plaintiffs' respiratory problems were caused by off-gassing of formaldehyde or other allergens from the uniforms. Scheinman Dep., Dkt. 170, at 134–35. She admitted that she would need to know more about a patients' prior respiratory history to determine whether respiratory symptoms were caused by the uniforms. *Id.* at 132. Similarly, Scheinman testified that she would want to know about a patient's history of ocular symptoms before determining the cause of new ocular symptoms, *id.* at 145, and to diagnose sensitization, she would have to conduct patch testing. *Id.* at 177. To determine the cause of alopecia, Scheinman testified that she would want to know whether the patient had a history of alopecia, whether they wore a uniform piece with a heavy metal that has been associated with causing hair loss, and whether the patient had that heavy metal in their bloodstream. *Id.* at 148–49. Scheinman did not have access to that information for any plaintiff. In light of the numerous caveats that Scheinman made during her deposition, her opinions regarding general and specific causation in her report are essentially meaningless.

Plaintiffs argue that Scheinman's opinions are supported by reliable methodologies for three reasons: (1) she used the methods of her discipline; (2) she applied the "Mathias criteria" to assess causation; and (3) she compared plaintiffs' skin complaints with surveillance studies of occupational contact dermatitis rates. But these arguments are unpersuasive. Scheinman admitted during her deposition that she did not use a generally-accepted medical decision-

making process, such as reviewing medical records, examining the patient, and conducting patch testing, to determine causation in this case. Instead, Scheinman applied the information she obtained from partial medical records of 15 plaintiffs and positive patch testing results from three plaintiffs to reach conclusions about medical causation for 603 plaintiffs, despite knowing that each plaintiff wore different garments containing different chemicals and suffered from various alleged health problems. Plaintiffs have not shown that Scheinman's methods were reliable or generally accepted by dermatologists for assessing causation.

Scheinman's purported application of the Mathias criteria also does not render her opinion reliable. Scheinman states her in report that she relied on seven criteria set forth in a 1989 article by Dr. Toby Mathias: "Contact Dermatitis and Workers' Compensation: Criteria for Establishing Causation and Aggravation." Scheinman Rep., Dkt. 175, at 6–7. Scheinman testified that only four of the seven criteria need to be satisfied to establish causation, and that at least four are established for plaintiffs. But Scheinman then admitted at her deposition that the Mathias criteria are to be applied by a treating physician who is physically examining the individual patient. Scheinman Dep., Dkt. 170, at 241. She was unable to cite to any scientific literature that supported her application of the Mathias criteria to diagnose contact dermatitis among individuals who she never treated or even spoke to, and for whom she had reviewed only partial medical records. She also admitted during her deposition that Mathias's article does not support extrapolating from the results of one patient to any other patient, and she admitted she could not apply the criteria accurately for any of the plaintiffs for whom she did not review medical records. Schneinman Dep., Dkt. 170, at 242, 270–71 ("Q: For everybody else who is a Delta employee who reported some skin symptoms, you do not currently have enough information to, for each one of those people individually, answer these questions, yes

or no? A. That's correct. Absolutely.""). Scheinman's reference to the Mathias criteria does not save her report.

Scheinman's comparison of the rates of skin complaints among Delta employees in 2018 and 2019 to data regarding occupational contact dermatitis rates in the United Kingdom from 2002 to 2005 also is not a reliable method of determining causation. Scheinman states in her report that approximately 1.3% of Delta flight attendants filed dermal complaints, which was 38 to 100 times more frequent than the surveillance results from United Kingdom studies. She concludes that the high rate of dermal complaints among Delta employees supports a finding that the Lands' End uniforms caused skin problems. But the Delta data is based on the unreliable self-reported skin symptoms from Delta employees, whereas the United Kingdom surveillance studies used information provided by treating physicians who had specifically diagnosed occupational contact dermatitis in individuals in a wide range of occupations. Scheinman does not explain why the data from the Delta flight attendant population is comparable to the United Kingdom population, or why comparing the data would be a valid method of determining causation.

In sum, although Scheinman is a highly qualified dermatologist, her opinions in this case are not supported by the methods she acknowledges are used in her field. Her opinions will be excluded. "A supremely qualified expert cannot waltz into the courtroom and render opinions unless those opinions are based upon some recognized scientific method." *Clark v. Takata Corp.*, 192 F.3d 750, 759 (7th Cir. 1999).

D. Summary

The court concludes that plaintiffs lack the required expert evidence to establish that the new Delta uniforms were defective. And because the court is excluding the opinions of Dr.

Freeman, Dr. Apple, and Dr. Scheinman, plaintiffs have no admissible evidence to prove their theory of general causation—that the chemicals or heavy metals in the Lands’ End uniforms transferred to plaintiffs at doses capable of causing the particular health problems that they suffered. Lands’ End contends that plaintiffs cannot succeed on their personal injury claims without demonstrating general causation, a point plaintiffs don’t dispute. *See Norris v. Baxter Healthcare Corp.*, 397 F.3d 878, 881 (10th Cir. 2005) (“Plaintiff[s] must first demonstrate general causation because without general causation, there can be no specific causation.”).

Plaintiffs have failed to meet their burden of proof on two essential elements of their personal injury claims, and Lands’ End is entitled to summary judgment on those claims. The court need not consider the parties’ arguments regarding plaintiffs’ treating physician disclosures or issue preclusion for those plaintiffs whose claims were denied by a workers’ compensation board.

The parties shall submit a joint proposed scheduling order by the deadline set forth below addressing how this case should proceed on plaintiffs’ remaining claims for property damage and breach of warranty.

ORDER

IT IS ORDERED that:

1. Defendant Lands’ End’s motion in limine to exclude the opinions of Michael Freeman, Dkt. 180, is GRANTED.
2. Defendant Lands’ End’s motion in limine to exclude the opinions of Fred Apple, Dkt. 183, is GRANTED.
3. Defendant Lands’ End’s motion in limine to exclude the opinions of Pamela Scheinman, Dkt. 188, is GRANTED.

4. Defendant Lands' End's motion in limine to exclude the testimony of plaintiffs' Rule 26(a)(2)(C) experts, Dkt. 191, is DENIED as moot.
5. Defendant Lands' End's motion for partial summary judgment, Dkt. 196, is GRANTED.
6. The parties shall confer and submit a joint proposed scheduling order by July 14, 2022 addressing how this case should proceed on plaintiffs' remaining claims relating to property damage and breach of warranty.

Entered July 8, 2022.

BY THE COURT:

/s/

JAMES D. PETERSON
District Judge